

A Western tower on the 230-kilovolt Elverta-to-Hurley line in Sacramento, California, shares space with a community garden. Western worked with Sacramento Municipal Utility District, the city of Sacramento and the community gardeners to find a solution that allows Western crews safe access to perform maintenance on the tower. Read the story on Page 11. (Photo by Sue Nielson) inside: 2 Reduce risk, increase reliability 4 Western beefs up security 6 Strategy evolution promotes measurement 8 Developing future Craft leaders 9 Employees learn about water, power nexus 11 SN, neighbors share easement land 12 Asset Management becomes program 12 brief transmissions

Reduce risk, increase reliability:

Combining two programs strengthens Western

by Lisa Meiman



very moment of every day, Western employees are responsible for complying with 115 North American Electric Reliability Corporation Reliability Standards, which include more than 1,250 requirements and sub-requirements. These requirements mandate a host of activities ranging from cyber and physical consuring appropriate officials have signed.

security measures to ensuring appropriate officials have signed the proper forms within the right time frames.

At the same time, those two example requirements pose different risks to the utility and bulk electric system, whose reliable operation is the goal of the NERC standards.

It takes a team effort to put the right people in the right place at the right time to manage all the NERC requirements, sustain grid operations and protect the utility.

On June 28, the Enterprise Risk Management and Reliability Compliance programs combined into a single office to help Western consistently and strategically approach reliability compliance, while also following an industry trend.

"Centralizing an independent team allows us to quickly adapt to regulatory standard changes, supports continuous improvement of internal controls and aligns with NERC's direction of a risk-based compliance program," said Executive Vice President and Chief Operating Officer Tony Montoya. "This strategic decision is aligned with the first two critical pathways of the Strategic Roadmap: Business, Technology, and Organizational Excellence; and Mutually Beneficial Partnerships."

VP of Risk and Reliability Compliance Matt Miller oversees the new program, which includes the enterprise risk manager, reliability compliance program manager and the four regional compliance managers who will all remain at their current duty stations and grade levels.

"I am really excited about this change. The reliability compliance managers are a highly qualified and dedicated group as is ERM Specialist **Keith Gittlein**," said Miller. "We want to build on what the reliability compliance managers have accomplished to date and take it to the next level across the agency."

BUSINESS, TECHNOLOGY AND ORGANIZATIONAL EXCELLENCE

ENERGY INFRASTRUCTURE -

Provide reliable power and transmission to the customer. Facilitate a more resilient and flexible energy delivery system.

El1 Regulatory and Compliance Optimization



Risk, reliability compliance make compatible partnership

Before the reorganization, regions conducted individual reliability compliance programs. The regional compliance managers and program manager talked to one another in weekly meetings through the Reliability Standards and Compliance Team, also known as RSCT, to discuss the various efforts and how best practices in each could be implemented Westernwide to save time and resources.

"Regions do things a little differently. Everyone is compliant, but the regions would collect evidence and show how they meet the requirements in different ways," said Desert Southwest Reliability Compliance Manager Matt Schmehl. "We want to do things the same way to promote efficiency and be better able to establish emphasis and priorities."

The reorganization gives the RSCT members more authority and presence in Western to create a central, risk-based internal compliance program. "We will create efficiencies in removing duplicating efforts and implementing common practices, training, policies and procedures," said Schmehl.

A second major expected outcome of the reorganization is improving Western's preparedness for reliability audits. Utilities are audited by NERC-registered regional entities every three years. But Western, who has separate NERC registrations for each region, faces four audits every three years.

"This reorganization demonstrates the commitment from the administrator and the Senior Executive Team to build a culture of compliance within Western," said Miller. "In the past, we had to push to prepare for audits by gathering appropriate evidence just before the audit, but the new approach is to maintain the appropriate compliance evidence on a regular basis and monitor those efforts to demonstrate our commitment to compliance to NERC and others."

"Having a single Westernwide program will continue to improve the compliance culture," said Schmehl. "We will develop consistent practices and procedures, and the training to go with it. This will ideally streamline our compliance efforts and make us more effective in backing each other up across the regional boundaries. A single

The Colorado River Storage Project Management Center previously had to follow NERC's standards, but had their compliance registrations migrated to Rocky Mountain in 2012.

program will also strengthen our mock audit program, which has shown to improve the audit experience for employees and result in fewer findings for Western."

Finally, the ERM program will help focus the reliability compliance program on monitoring those standards that will most affect the grid and Western's objectives. It will also continue working with the functional councils and working groups on mitigating Western's seven enterprise risks.

"Western has a lot of highly capable people keeping the electrons flowing. These changes to our reliability compliance program will help us document those efforts, improve them and demonstrate them to NERC and our customers," said Schmehl. □

Note: Meiman is a public affairs specialist.



Western beefs up physical security

by Lisa Meiman

infiltrations and surveillance of the nation's electrical infrastructure, Western is proactively assessing the security of its transmission stations, substations and primary control centers in advance of a new reliability standard anticipated to take effect this winter.

The North American Electric Reliability Corporation developed Critical Infrastructure Protection 014 to lessen the overall vulnerability of the bulk electric system, or BES, to physical attacks. The Federal Energy Regulatory Commission is expected to approve the new reliability standard soon, making its six requirements mandatory within 90 days.

"We recognized a need to identify our current physical security posture in 2013 and began to develop a holistic approach to physical security assessments and mitigation strategies that we would apply to all Western's sites before NERC even began drafting CIP 014," said Director of Security Keith Cloud.

NERC CIP 014's six new requirements essentially boil down to three steps utilities must take:

- Identify critical facilities on the BES
- Evaluate threats on those facilities
- Develop and implement plans to protect critical facilities against those threats

"Our goal is to reduce Western's overall physical security risks for all sites based on sound assessment and mitigation strategies," said Cloud.

"It is not primarily our assets I worry about at night," added Administrator and CEO Mark Gabriel. "It is the fear that one day, a Western employee will stumble upon some criminal activity at a site. We need to make sure we are adequately protecting our critical sites for employees and the reliability of the grid."

Staying ahead of the game

After NERC drafted CIP 014, the Office of Security and Emergency Management hired a contractor in 2014 to begin assessing all 300 sites across Western, starting with the sites covered under CIP 014. The assessments evaluate the current security posture and identify threats and additional countermeasures that either are required by Western or Department of Energy policy or recommended by the contractor.

"Western determined several of its transmission station, substations and primary control centers fell under CIP 014 and completed assessments for those sites and 21 others in 2014," said Headquarters' Physical Security Specialist Jaime Kirchue.

There is not an exact formula for determining a critical site. All facilities rated at 500-kilovolt and above automatically fall under CIP 014. The others are determined

by transmission system planners using load studies that then must be confirmed by a neutral third-party reviewer. Bonneville Power Administration serves as Western's reviewer to evaluate both the load studies and the resulting physical security and remediation plans.

"Once the physical security risk assessments and remediation plans are reviewed and approved by Western, the plans are released to the applicable region to either implement the remediation plan or accept the risk if not implementing certain security measures," said Kirchue, who has worked with physical security risk assessments for

What is a critical facility?

NERC defines a critical facility as "one that, if rendered inoperable or damaged, could have a critical impact on the operation of the interconnection through instability, uncontrolled separation or cascading failures on the Bulk Electric System."

the federal government for the past 10 years. "The plans are designed to allow regional and maintenance managers to make risk-based decisions on what countermeasures to implement based on their needs and available funding."

Western's plans include all physical threats, like natural disasters and criminal activity, outlines best practices in physical security and provides Western and DOE security policy. For example, Western's policy requires that all sites have a 7-foot fence around the perimeter and door locks.

Retrofitting a site could cost as much as \$500,000 or could cost nothing if the recommendations focus on personnel practices and administrative procedures, like not tailgating into a site or removing transmission maps from plain sight. New sites will be assessed as they are built, removing the need for expensive retrofitting after the fact.

Western will assess 75 noncritical sites each year through 2019 to complete initial assessments at all 300 sites. "These initial assessments will serve as a baseline for the recurring assessments that we will do to ensure our plans are up to date with current threat information," said Kirchue.

CIP 014 mandates a review period for risk assessments. Western will re-evaluate its critical sites every 30 months and noncritical sites every 60 months to make sure plans have the most up-to-date threat information and best countermeasures.

No utility an island

OSEM has taken steps to improve Western's communication and information sharing when there are incidents at sites. One of the chief obstacles to effective security response and awareness in the energy industry is the difficulty utilities have sharing information with one another and with counterintelligence agencies. The problem is due both to a lack of communication protocols and appropriate infrastructure for sharing information and a self-inflicted fear of communicating incidents because of, ironically, security concerns.

"Cross communication is a vital part of incident reporting. Western has taken steps to communicate with industry partners on incidents to promote information sharing. We have recently updated our reporting procedures to identify specific roles and responsibilities and ensure proper incident notifications to agency stakeholders, law enforcement, State Fusion Centers and Electricity Sector Information Sharing and Analysis Center," said Cloud.

Western is also participating in Project Power Surge, a collaborative group of Department of Energy organizations that are trying to standardize the risk assessment approach for the industry. The initiative's goal is to develop an all-hazards process that will cover both cyber and physical security and identify different levels of security standards for critical and noncritical sites.

"Our primary concern over physical security is the impact to our staff and others who may be injured as a result of a physical security incident," said Cloud. "Western takes the safety of staff and others very seriously and is taking every attainable measure to protect our employees from a potential incident."

Note: Meiman is a public affairs specialist.

Strategy evolution promotes alignment, measurement

arlier this year, **Dennis Sullivan** joined Western as Chief Strategy Integrator. In this role he is responsible for integrating our strategic roadmap, its tactical action items and strategic planning activities into daily practice across all functional areas and offices. His position calls for creating more actionable plans.

Western has long been tracking its progress, but what data the organization tracks and how we track it evolves and improves each year. One of Sullivan's priorities is to expand Western's scorecard system to target and measure improvement rather than the completion of tasks. "Checking off a box that shows you completed a task doesn't really tell you much," Sullivan said. "When you measure the improvement of something, you get a much clearer idea of where you stand."

For example, one 'check-the-box' task is promoting the Federal Employment Viewpoint Survey. A 'measure-the-task' metric aims for a certain percentage of respondents. Measuring improvement is more involved, and yields more meaningful results. Western used last year's FEVS to baseline the degree to which our employees feel engaged in their workplace. Many work units across Western developed action plans to address issues identified in the survey. Sullivan explained, "We will soon see this year's results to determine whether or not those action plans made a difference as well as identify additional opportunities to improve."

This is especially important when considering the four critical pathways of Roadmap 2024. Unless you define what "evolution of services" means, how will you know when it is complete? How will you know if you're improving, or moving forward along the pathway, unless you set quantifiable benchmarks? Sullivan is working to align the strategic targets with the roadmap and create measurable metrics.

In Fiscal Year 2015, there are six quantifiable metrics; in FY 2016, there will be about 20.

And 15 of Western's 23 Key Performance Indicators will be covered by these different quantifiable metrics. In an effort to align the roadmap and targets with employee's daily activities, Western continues to work toward incorporating roadmap elements into employee's performance plans.

Another goal Sullivan has for FY 2016 is to help the senior management team and leadership councils implement an effective governance structure—one that increases collaboration up, down and across the organization to create and sustain Westernwide alignment to strategy. Sullivan added, "I want to continue to evolve our approach to prioritize and select the right initiatives."

So how are we doing?

The scorecard on the following page gives a summary of Western's performance. Seventeen targets are measuring "on track" and six are "yellow," which indicates "on track with caution."

In a memo to the Deputy Secretary of Energy, Administrator and CEO Mark Gabriel wrote, "One of the key expected outcomes throughout Strategic Roadmap 2024 is increasing reliability in our energy infrastructure. We have made great strides this year with a 54-percent reduction in accountable outages compared to this time last year."

A highlight for the third quarter was moving one of the Human Capital Management KPIs from red to yellow. This advancement can largely be attributed to Western's Continuous Process Improvement Program's effort to improve the organization's hiring process.

Referring to the entire scorecard, Gabriel added, "These targets continue to be cascaded through the performance management process to create a line of sight between employee efforts and Western's direction."

The scorecard will continue to evolve, tracking our progress and informing stakeholders about the health of our organization as we carry out our mission and progress along the roadmap. "I've appreciated how engaged the leadership councils, business unit leaders and their teams have been with helping me evolve our approach," Sullivan shared. "I look forward to seeing how we progress."



FY 2015 Key Performance Indicators Summary – Quarter 3

Agency Targets and Key Performance Indicators	Q1	Q2	Q3	EOY
.0 Power and Transmission Related Services - Overall Green			•	
 KPI 1 - Services are value added and customized to achieve customer satisfaction. 	•	•	•	
 KPI 2 - Processes associated with transmission services and rates are standardized, where appropriate, and provide flexibility to meet customer needs. 	•	•	•	
 KPI 3 - Organizational capacity and capabilities are available to meet evolving product/service offerings. 	•	•	•	
.0 Energy Infrastructure - Overall Yellow			0	
 KPI 1 - Transmission performance is improved to enhance reliable delivery of hydropower and related services. 	•	•	•	
 KPI 2 - Electric Reliability Standard Compliance program fosters a culture of compliance to reliably meet customer needs. 	•	•	•	
 KPI 3 - Human performance expectations are designed to reduce the likelihood of human error and achieve sustainable event free operations. 	•	•	•	
.0 Partnership and Innovation - Overall Green			•	
 KPI 1 - Strategic partnerships are cultivated to advance the energy frontier and meet future customer needs. 	•	•	•	
 KPI 2 - Technological and innovation investments produce expected improvements to ensure efficiency and sustain innovation. 	•	•	•	
 KPI 3 - Organizational culture supports innovation and partnership. Organizational capabilities are developed to recognize the convergence of Information Technology and Operational Technology. 	•	•	•	
.0 Asset Management - Overall Green			•	
KPI 1 - Asset Management processes reduce risk to improve asset value.	•	•	•	
• KPI 2 - Sustainable funding is sufficient to support core mission needs.	•	•	•	
• KPI 3 - Enterprise Risk Management discipline promotes sound corporate risk management.	•	•	•	
.0 Safety and Security - Overall Green			•	
KPI 1 - The risk of a physical security breach is reduced to provide workplace security.	•	•	•	
• KPI 2 - Organizational cybersecurity maturity increases to improve business performance.	•	•	•	
 KPI 3 - Safety and Occupational Health program excellence is maintained to achieve high levels of personnel safety. 	•	•	•	
 KPI 4 - Emergency response and readiness capabilities are high to protect employees and increase resiliency of our mission. 	•	•	•	
.0 Communication - Overall Green			•	
 KPI 1 - Western's story is told in a timely fashion using strategic methods and messages to facilitate trust and improve understanding and transparency. 	•	•	•	
 KPI 2 - Western's participation in customer, industry and other external forums is managed effectively and efficiently and is prioritized and aligned with internal and external stakeholder needs. 	•	•	•	
• KPI 3 - Employees are empowered to be ambassadors of Western to be able to tell Western's story.	•	•	•	
'.0 Human Capital Management - Overall Green			•	
 KPI 1 - Employee development ensures a customer-focused, high-performing, competent workforce. 	•	•	•	
 KPI 2 - Budget and full time equivalents are strategically managed to secure and maintain an optimal workforce. 	•	•	•	
 KPI 3 - Barriers to hiring and retention of highly qualified, diverse employees are addressed to attract and maintain a high performing workforce. 	•	•	•	
KPI 4 - Workforce performance and employee engagement are increased.	•	•	•	



Developing future Craft leaders

estern's
inaugural Craft
Leadership
Development
Program
participants gathered in Watertown,
South Dakota, June 23-24, for their
second face-to-face meeting.

The CLDP is a two-year specialized program that prepares craft employees for foreman responsibilities. Participants got their hands in several topics, including communication training, a visit to the Watertown Operations Office and planning for rotational assignments in other regions to learn what Western is all about. Below, Rocky Mountain Lineman **Greg Mathiowetz** tells CLDP participants about the new transmission line inspection tool and

how it will improve asset management of transmission lines and their components. In addition to ongoing training, mentorship, working on Individual Progression Plans, rotational assignments and committee work, the CLDP participants will get together about every six months. Their next face-to-face meeting is scheduled for January 2016 in Folsom, California. □ (Photos by **Lisa Meiman**)



Field trip! Employees learn about water, power nexus

alf a dozen Rocky Mountain employees joined a free tour, July 8, hosted by the Northern Colorado Water Conservancy District, to learn about transbasin water operations that divert Colorado River water from the west slope under the Continental Divide to Colorado's east slope. Featured on the tour were the Windy Gap and Colorado-Big Thompson projects, and the connection to Western's transmission system to power pumping plants in the area. Western provides the power that supports both the federal water operations of the Bureau of Reclamation's Colorado-Big Thompson and Northern Water's Windy Gap projects and also markets the power generated by the Colorado-Big Thompson's six powerplants. Northern Water owns and operates Windy Gap and operates and maintains the Colorado-Big Thompson's water facilities on behalf of Reclamation. □



Rocky Mountain Public Utilities Specialists *Annette Meredith* and *Steven Forster* admire the wildlife bird refuge at Northern's Windy Gap Reservoir. Western provides power to the Windy Gap Pumping Plant. (Staff photo)



Rocky Mountain Realty Clerk *Tracy Rogers*, a Wyandotte Services contractor, stands in front of the historic west portal of the Adams Tunnel that carries water from Colorado's west slope to the east slope. Western's power line provides electricity to open and close the radial gates that control water entering the tunnel. (Staff photo)



A panoramic view of Windy Gap Pumping Plant and Windy Gap Reservoir. (Staff photo)



Growing gardens, relationships eigh easement land

Story and photo by Sue Nielson

t is important to have good neighbors. Whether you are great friends with your neighbors or live in polite coexistence, good neighbors make life noticeably easier, safer, quieter and happier.

With "home" extending 1.3 million square miles across 15 states. Western has a lot of neighbors, and we pride ourselves on trying to be good neighbors with those whose lands we share.

Recently, Sierra Nevada worked with the Sacramento Municipal Utility District, city of Sacramento and local community gardeners to find ways to coexist under the Elvertato-Hurley 230-kilovolt line while protecting public and employee safety and the reliability of the grid.

Western and SMUD have parallel transmission lines running south of the Los Niños Parkway in Sacramento, California, that serve as part of northern California's interconnected transmission system, supplying power to the whole region. The city of Sacramento, which still owns the land underlying our easement, sanctioned community gardens for a nearby low-income community to grow sustainable food for their families.

Western allows farming crops within our easements, but in this case, the gardens and associated improvements are blocking access to two towers: one on Western's line and the other on SMUD's line. To comply with North American Electric Reliability Corporation and Federal Energy Regulatory Commission safety and reliability requirements, utilities including Western-need 24/7 access to and around the towers.

SN and SMUD have been meeting with the city, the low-income housing management company and the community gardeners to re-establish SMUD's and Western's legal access to and around our towers while minimizing the impact to the gardens.

The community gardens situation was unique because it is located in an urban location, unlike the commercial farms, ranches and orchards in many areas.

In the spirit of working with landowners to resolve our differences, several remedial

actions are in progress. SMUD is purchasing an access easement from an adjacent cul-desac as the closest point of ingress and egress to the two towers. This minimizes the impact to the gardens as an alternative to clearing a route along the length of the right of way. SMUD and Western will enter into a costsharing agreement for the construction of the access, and when the access is ready, SMUD will issue a License Agreement to Western for access. The city came to the aid of the gardeners and will install another community garden within their Los Niños Park just north of the existing location. The gardeners have been cooperative during the meetings and appreciate the effort to minimize the overall impacts.

Western strives to be good neighbors and work with landowners where our rights of way cross orchards, farms and ranches. We were fortunate to work with other local cooperating entities to retain round-the-clock access to our towers. \square

Note: Nielson is a realty specialist in Sierra Nevada.

A community garden grows underneath a Western tower and near a Sacramento Municipal Utility District tower in Sacramento, California, on Western's 230-kilovolt Elverta-to-Hurley line. Sierra Nevada Lands employees worked with SMUD, the city of Sacramento and the community gardeners to find a solution that allows for the garden as well as safe access to the towers.

Asset Management becomes program

estern is currently transforming its asset management activities under the Asset Management Program Improvement Project, or AMPIP, into a datadriven Transmission Asset Management Program. The AMPIP effort has already provided two years of asset risk reports that show the general systemwide health of three critical Western assets and provides trending analysis.

Now Western will use these reports and analysis to provide risk-based information to help with capital investment recommendations for senior management, customers and other stakeholders using industry standards and best practices.

Formalized under WAPA Order 413.3 in April, the Transmission Asset Management Program is taking steps to integrate Asset Management principles, practices and policies into

> Western's day-to-day business practices. First, the program is working on its overall organizational structure that is planned to be in place later this year.



Asset Management specialists are already in place in each region and at the Colorado River Storage Project Management Center. Specialists include: Jeff Robertson in Fort Peck, Montana; Jon Ridout in Loveland, Colorado; Amy Cutler in Salt Lake City, Utah; Valerie Berk in Phoenix, Arizona; and Dusty Little in Folsom, California.

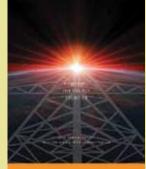
Second, the program is developing a 10-year Strategic Asset Management Plan. This plan will outline the issues and activities for Western to focus on over the next decade in support of Western's strategic roadmap. It will be an evolving plan that incorporates all aspects of asset management's goals, cost-benefit analysis, staffing, and stakeholder needs and expectations.

To develop this Strategic Asset Management Plan, detail opportunities will be available soon. "This is a great opportunity for anyone looking to contribute to development of this new program and get not only an understanding but to also engage in strategic initiatives that will be carried out during the next 10 years," said Western's Transmission Asset Planning Program Manager David Radosevich. Look for more information about detail opportunities in an email from Human Resources.

brief transmissions

2014 Annual Report available

estern published its Fiscal Year 2014 Annual Report, Aug. 7. Titled *Powering the Energy Frontier*, the report illustrates the achievements and contributions in 2014 that moved Western toward its desired future state as part of Strategic Roadmap 2024. The report also provides combined financial statements for Western, **Bureau of Reclamation and Army Corps** of Engineers. Read the report at http:// go.usa.gov/3ssUj. You can also find it



on www.wapa.gov under Newsroom, News Releases, 2015.

Proposed transmission project reaches environment milestone

n July 17, Sierra Nevada opened a public comment period for the San Luis Transmission Project draft environmental impact statement ending Aug. 31. SLTP includes 95 miles of proposed transmission lines in northern California that will connect the Bureau of Reclamation's San Luis Unit pumping facilities to the Central Valley Project and support Reclamation's continued economic delivery of federal water to customers. SN will hold two public meetings in the project area to share information with the public and hear input on the draft EIS and project. Learn more at www.sltpeis-eir.com.

BFIT: Improving budget formulation

he Office of the Chief Financial Officer has a new tool for managing Western's budget, the Budget Formulation Integration Tool. BFIT provides a more efficient and effective way to formulate, execute and report on Western's budget.



Budget analysts from throughout the organization participated in hands-on training sessions July 20-21 and July 23-24, at Headquarters in Lakewood, Colorado. (Photo by Joel Klassen)